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CLAIMS

1. An aerator for aerating a medium such as soil, said aerator comprising;

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- a plurality of drills, said drills being adapted to cut a hole in said medium;
 - a plurality of hollow tine tubes arranged such that in use the tubes are in cooperating relationship with a collection box;
- said time tubes and said drills being arranged such that the cut medium is moved up the drills, through the hollow time tubes and into the collection box.
- 2. An aerator as claimed in claim 1, wherein said drills comprise a double claw cutting arrangement and a body that is either twisted from a flat form, or otherwise fluted, to form a helical staircase, the drills being designed such that when the drills are rotated a vertical shearing action is produced for removal of the medium.

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3. An aerator as claimed in any preceding claim, wherein said aerator further comprises a thrower disc attached to said drills, said disc being configured to deflect the upward moving soil particles into said collection box.

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- 4. An aerator as claimed in any preceding claim, wherein said hollow time tubes are configured to control the drill position during linear travel.
- 30 5. An aerator as claimed in any preceding claim further comprising a push tube having a double tension mechanism; said push tube being configured such that at a first tension both the drill and tine tube are moved to contact the

surface of the medium and enter a short distance and at a second tension the time tubes stay resting on the surface of said medium and said drills enter said medium.

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5 6. An aerator as claimed in any preceding claim, wherein said collection box is removable and comprises a series of holes accommodating said time tubes.

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- 7. An aerator as claimed in any preceding claim, further comprising a manual or automatic location device configured to measure the relative location of a footprint for a new set of holes.
- 8. An aerator substantially as herein described with reference to Figures 1-9 of the accompanying drawings.